

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Application of:

Moore, et al

Application No.: 09/576359

Filed: May 22, 2000

For: SYSTEM AND METHOD FOR
CREATING AND DISPLAYING
CLASSES OF GRAPHICAL
DISPLAY OBJECTS

Group Art Unit: 2173

Confirmation No. 1848

Examiner: Vu, Kleu D.

APPELLANTS' BRIEF

TO THE COMMISSIONER FOR PATENTS:

This communication is submitted in response to the Final Office Action dated February 24, 2006 and the Notice of Appeal filed on May 24, 2006 pertaining to the captioned patent application identified above.

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I. REAL PARTY IN INTEREST

The rights of the inventors in this application have been assigned to RealNetworks, Inc. of Seattle, Washington.

II. RELATED APPEALS AND INTERFERENCES

Applicants, applicants' legal representative, and the above-identified assignee are unaware of other appeals or interferences which will directly affect or be directly affected by or have a bearing on the Board's decision in the present appeal.

III. STATUS OF THE CLAIMS

Claims 14-15, 25-26, 28-29, 34-35, and 38 are currently pending.¹ Applicants appeal the rejection of each of these claims.

IV. STATUS OF AMENDMENTS

As requested by the Examiner, a full set of claims as currently entered is attached in Appendix A. These claims include minor typographical amendments requested in an amendment submitted along with the initial Appellants' Brief. Applicants' response to the final rejection, filed on, April 5, 2006, was entered and considered, but was not deemed to place the application in condition for allowance.

V. SUMMARY OF THE INVENTION

A. Statement of the Problem

The increased use of computer software has led to the creation of graphical display objects that allow users to customize the look of a running software module. For example, the RealNetworks® Real Jukebox® program allows the user to customize the look of the RealJukebox® program through the use of Skins. Currently, users create their own graphical display objects by defining objects, such as buttons, graphics, and menus that will appear in the graphical display. The definitions may include, for example, the location of the object, the color of the object, the size of the object and the corresponding graphics file.

One common problem with conventional approaches is that the creation of graphical display objects is a very time consuming task as the user has to define each element that will appear in the graphical display object. An additional problem is that the definition of the graphical display object can be quite time-consuming. Thus, if a user wants to use multiple graphical display objects, the user must store multiple definitions which require significant storage space.

¹ Appendix A of this brief contains a copy of Claims 14-15, 25-26, 28-29, 34-35, and 38.

B. The Invention

Aspects of the present invention are directed to an apparatus and a method for creating and displaying classes of graphical display objects that offer several distinct advantages that overcome the problems presented by the cited prior art references. The apparatus comprises a storage medium and a processor communicatively coupled to the storage medium. The storage medium includes instructions stored thereon which are executed by the processor that enable a media player of the apparatus to receive an identifier of a graphical display object, receive default definition data of a class related to the graphical display object, receive custom definition data related to the graphical display object and build the graphical display object based first on custom values for the custom definition data and then on default values for the default definition data that are not included among the custom values of the custom definition data.

The other aspect of the present invention is a method comprising receiving by a media player operating on an electronic device, an identifier of a graphical display object, retrieving by the media player default definition data of a class related to the graphical display object, retrieving by the media player custom definition data related to the graphical display object, and building by the media player the graphical display object based first on custom values for the custom definition data and then on default values of the class default definition data that are not included among the custom values of the custom definition data.

C. Summary of Related Advantages

The main advantage provided by the apparatus and method of the present invention is the ability to dramatically reduce the amount of time and space required to define and create new graphical display objects. Specifically, the apparatus and method enable the timely and efficient creation of graphical display objects by enabling them to be built first from custom values provided by custom definition data and then default values from default definition data that is not included among the custom values of the custom definition data. Thus, the advantage lies in the ability to create objects from distinctly different sets of default and custom values even though one or more of the elements for which there are default values and custom values are the same.

An added advantage provided by the apparatus is its ability to enable a media player to provide such efficiency in the definition and creation of graphical display objects. Likewise, the method of the present invention provides the advantage of having the media player build the graphical display object in the ordered manner described above. Both of these characteristics represent distinctly different and significant operational efficiencies and advantages over the prior art.

VI. SUMMARY OF THE PRIOR ART

A. U.S. Patent No. 5,887,193 to Takahashi et al.

Takahashi et al. describe a control system, a system control method and an apparatus which are comprised of a plurality of peripheral devices represented as objects and a controller that is connected to the plurality of peripheral devices via a common communication line for unitary control of the peripheral devices. The controller is arranged to be connected to an arbitrary number of the peripheral devices and to read control information stored in the devices via the communication line into a predetermined memory area of the controller in a predetermined format so that the controller can control the arbitrary number of peripheral devices. The

controller is also arranged to issue a command and transmit the command to each of the arbitrary number of peripheral devices via the communication line.

In the apparatus embodiment, object data about the control of a function of each of the plurality of peripheral devices is stored in a respective one of the plurality of peripheral devices in advance. The controller loads, when connected to an arbitrary peripheral device selected from among the plurality of peripheral devices, the object data from the selected peripheral device to form an object corresponding to the peripheral device and also to display a manipulation picture that will be under control of the controller for manipulating the peripheral device on the basis of the object data. The controller outputs an instruction onto the communication line via the object based on a manipulation of the manipulation picture displayed on the controller to control the arbitrary peripheral device.

The apparatus described in this reference, however, does not build a manipulation picture (e.g., a graphical display object) from both custom data and default data. Likewise, the system control method disclosed in this reference does not comprise building a manipulation picture by a media player based first on custom values and then on default values not included among the set of custom values.

B. U.S. Patent No. 5,603,034 to Swanson

Swanson describes a graphical resource editor for selectively modifying graphical resources in a software application that includes a main window graphical user interface object for interaction with the graphical resource editor. Within the main window is a resource category selection object including a list of selectable resource category objects. The objects contain resource category descriptors corresponding to categories of editable resources. The resource category selection object provides a user activatable interface for selecting an editable resource category from among the list of resource category objects.

The graphical resource editor further includes a system responsive to user activation of the resource category selection object for generating in the main window a list of resource descriptors corresponding to a selected category of editable resources. A plurality of resource value display fields are also provided in the main window for displaying resource values representing the status of the selected category of editable resources. The main window also includes a set of resource value selection objects that provides user activatable interfaces for setting editable resource values.

The customization of the software application can be performed by saving resource edits to a resource file or by dynamically applying resource edits on-the-fly to an application running concurrently with the graphical resource editor. In applying such customizations, the graphical resource editor will utilize a resource filter mechanism to specify only resources that are desirable to edit. The filtering mechanism is implemented through a custom data file referred to as an application specific "app-custom" file. The information contained in this "app-custom" file is used by the graphical resource editor to build a custom interface window based on customization information included in the file. It is intended that such app-custom files will be generated for each application to be used with the graphical resource editor. However, a user can create a default app-custom file to be used when an application specific app-custom file is not available.

The method for customizing graphical resources of a software application disclosed in *Swanson*, however, does not include building a graphical display object based first, on the data in the application specific app-custom file and then on the data in a default app-custom file which is not included in the data included in the application specific app-custom file.

VII. REJECTIONS

In the Office Action dated February 2, 2006, Claims 14, 15, 25, 26, 28, 29, 34, 35 and 38 were rejected under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 5,887,193 to *Takahashi et al.* in view of U.S. Patent No. 5,603,034 to *Swanson*. All of the recited claims remain pending in the application. Reconsideration of this application by the Board is respectfully requested in view of the following remarks and arguments.

VIII. ISSUES

A. Whether the Examiner erred in rejecting all claims in Group I as being obvious under 35 U.S.C. §103(a) over *Takahashi et al.* in view of *Swanson*?

B. Whether the Examiner erred in rejecting all claims in Group II as being obvious under 35 U.S.C. §103(a) over *Takahashi et al.* in view of *Swanson*?

IX. GROUPING OF CLAIMS

The pending claims can be grouped according to statutory class. Specifically, a first group is comprised of Claims 14, 25, 26, 34 and 38 which collectively are directed to the apparatus embodiment of the present invention (referred to herein as “**Group I**”). A second group comprised of Claims 15, 28, 29 and 35 is collectively directed to the method embodiment of the present invention (referred to herein as “**Group II**”).

X. ARGUMENT

A. Relevant Case Law

In each of the rejections presented above and asserted in the Office Action, the Examiner has attempted to use the pending application to define the problem to be solved by reference to different elements from the prior art. The Federal Circuit has clearly indicated that any attempt to selectively cull from the prior art to fit a claimed invention is prohibited. In this regard, the Board is directed to the following decisions of the Federal Circuit:

When the Board does not explain the motivation, or the suggestion or teaching, that would have led the skilled artisan at the time of the invention to the claimed invention as a whole, we infer that the Board used hindsight to conclude that the invention was obvious...To reach a non-hindsight driven conclusion as to whether a person having ordinary skill in the art at the time of the invention would have viewed the subject matter as a whole to have been obvious in view of multiple references, the Board must provide some rationale, articulation, or reasoned basis to explain why the conclusion of obviousness is correct. *In re Kahn*, 441 F.3d 977, 78 U.S.P.Q.2d 1329 (Fed. Cir. 2006).

[D]etermination of obviousness cannot be based on the hindsight combination of components selectively culled from the prior art to fit the parameters of the patent invention. There must be a teaching or suggestion within the prior art, within the nature of the problem to be solved, or within the general knowledge of a person of ordinary skill in the field of the invention, to look to particular sources, to select particular elements, and to combine them as combined by the inventor. *Crown Operations Intern., Ltd. v. Solutia Inc.*, 289 F.3d 1367, 62 U.S.P.Q.2d 1917 (Fed. Cir. 2002).

Although the suggestion to combine references may flow from the nature of the problem, defining the problem in terms of its solution reveals improper hindsight in the selection of the prior art relevant to obviousness. Therefore, when determining the patentability of a claimed invention which combines two known elements, 'the question is whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination'... We cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. *Ecolchem, Inc. v. Southern California Edison Co.*, 227 F.3d 1361, 56 U.S.P.Q.2d 1065 (Fed. Cir. 2000). (quoting *Lindemann Maschinenfabrik GMBH v. American Hoist*, 730 F.2d 1452, 221 U.S.P.Q. 481 (Fed. Cir. 1984)). (Emphasis added).

Obviousness may not be established using hindsight. In determining obviousness, the invention must be considered as a whole and the claims must be considered in their entirety. *Kahn v. General Motors Corp.*, 135 F.3d 1472, 45 U.S.P.Q.2d 1608 (Fed. Cir. 1998).

It is impermissible...to engage in a hindsight reconstruction of the claimed invention, using the applicant's structure as a template and selecting elements from references to fill the gaps. The references themselves must provide some teaching whereby the applicant's combination would have been obvious. *In re Gorman*, 993 F.2d 982, 18 U.S.P.Q.2d 1885 (Fed. Cir. 1991).

In reviewing the decisions of the Board which are based on...obviousness grounds, our focus must be whether "the differences between the subject matter sought to be patented and the prior art are such that the *subject matter as a whole* would have been obvious at the time the invention was made." *In re Kaslow*, 707 F.2d 1366, 217 U.S.P.Q. 1089 (Fed. Cir. 1983).

In view of the foregoing, applicants respectfully request reconsideration and withdrawal of the rejections of independent Claims 14 and 15. In addition, applicants suggest that Claims 25, 26, 34 and 38, which depend directly or indirectly from Claim 14, are patentably distinct over the combination of *Takahashi et al.* in view of *Swanson*. Applicants further suggest that Claims 28, 29 and 35 which depend directly or indirectly on independent Claim 15 are also patentably distinct over the cited references.

B. Group I Claims

The Examiner erred in rejecting all claims in Group I on obviousness grounds under 35 U.S.C. §103(a) of the U.S. Patent Act. This section of the statute states the following:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, *if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole* would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made. (Emphasis added).

Independent Claim 14 reads as follows:

An apparatus comprising a storage medium having stored thereon a plurality of programming instructions designed to enable a media player of the apparatus to receive an identifier of a graphical display object; receive default definition data of a class related to the graphical display object, the class of default definition data having default values for a first plurality of elements of the graphical display object; retrieve custom definition data related to the graphical display object, the custom definition data having custom values for a second plurality of elements of the graphical display object, one or more of the first and second elements being the same elements; build the graphical display object based first, on the custom values of the second plurality of elements and then, on the default values of the first plurality of elements that are not included among the second plurality of elements; and a processor communicatively coupled to the storage medium to execute the programming instructions. (Emphasis added).

It has long been established that a determination of the obviousness of an invention requires consideration of the claimed invention as a whole, not merely the differences between the claimed invention and the prior art. *Lear Sigler, Inc. v. Aeroquip Corp.*, 733 F.2d 881, 221 U.S.P.Q. 1025 (Fed. Cir. 1984). Each and every recitation in a claim must be considered in the context of the claimed invention as a whole, not as a collection of individual recitations.

Here, the cited patent references do not teach, suggest or describe each recitation of independent Claim 14. Specifically, the cited patent references do not teach, suggest or describe an apparatus comprising a storage medium that is designed to enable a media player of the apparatus to “build a graphical display object based first, on the custom values of the second plurality of elements and then, on the default values of the first plurality of elements that are not included among the second plurality of elements....” (Emphasis added). In contrast, *Takahashi et al.* describe a system control apparatus having a panel view setting menu object for creating a graphical display of a control panel. In order to create a control panel, each object included in the panel must be created from data in either a “default” file or a “custom” file (see col. 21, lines 8-20). No teaching or suggestion is provided in this reference for creating a graphical display object such as a control panel for this apparatus that is comprised of elements having both default values and custom values.

Indeed, the reference explicitly teaches away from the claimed recitation. In a representative example, the reference states with regard to the switching of a view for a graphical display object like a control panel that “in the case of a default setting, since the system director object 205 reads the digital VTR delegate object description file named ‘Default’ and generates the digital VTR control panel object, the digital VTR control panel display picture is displayed in its default

state and the panel view setting menu is set to 'Default.'" (Col. 21, lines 37-39). The reference continues by indicating that "if a user selects 'Custom1' of the panel view setting menu with the cursor of the pointing device, the panel view setting menu object sends the message "Create object with file 'Custom1'" to the system director object....In response to the message, the system director object discards and regenerates the digital VTR delegate object through the multimedia device delegate object generating means." (Col. 21, lines 39-47) (Emphasis added). Evidently, a graphical display object such as a control panel produced using this apparatus could not be comprised of data from both a default file and a custom file. Instead, a file created from data in a default file would necessarily have to be discarded and regenerated anew using data from a custom file.

Swanson does not overcome the limitations of *Takahashi et al.* with respect to an apparatus that enables a media player to build a graphical display object based first on custom values and then on default values that are not included among the custom values. As stated earlier, *Swanson* describes a graphical resource editor for selectively modifying graphical resources in a software application that includes a main window graphical user interface object for interaction with the graphical resource editor. In the process of creating a graphical display object, the resource editor will search a predetermined path for an application specific app-custom file. In the absence of such a custom file, the resource editor will use a default app-custom file. If neither file can be found, then an error message will be displayed in a pop-up window. Nothing in this reference suggests that the resource editor would search for values in the default app-custom file when an application specific app-custom file is found from an initial search along a predetermined search path. Furthermore, there is no suggestion in this reference that a graphical display object would be built from values included in both a default app-custom file and an application specific app-custom file even if both types of files existed and were accessible along a predetermined search path.

Accordingly, neither *Takahashi et al.* nor *Swanson*, alone or in combination, teach, suggest or disclose this recitation of Claim 14. Furthermore, the combination of references does not teach, suggest or disclose each recitation of dependent Claims 25, 26, 34 and 38 when the recitations of each claim are considered as a whole in view of their dependency from independent Claim 14.

C. Group II Claims

The Examiner erred in rejecting all claims in Group II on obviousness grounds under 35 U.S.C. §103(a) of the U.S. Patent Act. Independent Claim 15 reads as follows:

A method comprising: receiving by a media player operating on an electronic device, an identifier of a graphical display object; retrieving by the media player, default definition data of a class related to the graphical display object, the class default definition data having default values for a first plurality of elements of the graphical display object; retrieving by the media player, custom definition data related to the graphical display object, the custom definition data having custom values for a second plurality of elements of the graphical display object, one or more of the first and second elements being the same elements; and building by the media player, the graphical display object based first, on the custom values of the second plurality of elements and then, on the default values of the first plurality of elements that are not included among the second plurality of elements. (Emphasis added).

As discussed previously, a long line of case law decisions from the Federal Circuit has established that a determination of the obviousness of an invention requires consideration of the

claimed invention as a whole, not merely the differences between the claimed invention and the prior art. In the inquiry, each and every recitation in a claim must be considered in the context of the claimed invention as a whole, not as a collection of individual recitations.

The cited patent references do not teach, suggest or describe each recitation of independent Claim 15. Specifically, the cited patent references do not teach, suggest or describe the method step of “building by the media player, the graphical display object based first, on the custom values of the second plurality of elements and then, on the default values of the first plurality of elements that are not included among the second plurality of elements.” (Emphasis added). *Takahashi et al.* describe a system control method which employs a plurality of peripheral devices represented as objects, a controller for unitarily controlling the plurality of peripheral devices, and a common bi-directional interface which provides connectivity between the controller and the peripheral devices. Control of the peripheral devices would be achieved through use of a control panel, which is itself a graphical display object whose shape and function can be defined and created by a user. As discussed previously, a panel view setting menu object can be employed to create a graphical display of the control panel. However, each object included in the panel must be created from data in either a “default” file or a “custom” file (see col. 21, lines 8-20). No teaching or suggestion is provided in this reference of a method for building a graphical display object such as a control panel that comprises first custom values and then default values for the elements included in this graphical object.

Indeed, the reference explicitly teaches away from the claimed recitation. In a representative example, the reference states with regard to the switching of a view for a graphical display object like a control panel that “in the case of a default setting, since the system director object 205 reads the digital VTR delegate object description file named ‘Default’ and generates the digital VTR control panel object, the digital VTR control panel display picture is displayed in its default state and the panel view setting menu is set to ‘Default.’” (col. 21, lines 37-39). The reference continues by indicating that “if a user selects ‘Custom1’ of the panel view setting menu with the cursor of the pointing device, the panel view setting menu object sends the message “Create object with file ‘Custom1’” to the system director object....In response to the message, the system director object discards and regenerates the digital VTR delegate object through the multimedia device delegate object generating means.” (col. 21, lines 39-47) (Emphasis added). Evidently, a method for building a graphical display object such as a control panel could not include data from both a default file and a custom file. Instead, a file created from data in a default file would necessarily have to be discarded and regenerated anew using data from a custom file.

Swanson does not overcome the limitations of *Takahashi et al.* with respect to a method that comprises building by the media player a graphical display object based first on custom values and then on default values that are not included among the custom values. As stated earlier, *Swanson* describes a graphical resource editor for selectively modifying graphical resources in a software application that includes a main window graphical user interface object that interacts with the graphical resource editor. In the process of creating a graphical display object, the resource editor will search a predetermined path for an application specific app-custom file. In the absence of such a custom file, the resource editor will use a default app-custom file. If neither file can be found, then an error message will be displayed in a pop-up window. Nothing in this reference suggests that the resource editor would search for values in the default app-custom file when an application specific app-custom file is found from an initial search along the predetermined path. Furthermore, there is no suggestion that a method for building a graphical

display object would involve a media player and that values from both a default app-custom file and an application specific app-custom file would be used to create the graphical display object even if both types of files existed and were accessible along the predetermined path.

Accordingly, neither *Takahashi et al.* nor *Swanson*, alone or in combination, teach, suggest or disclose this recitation of Claim 15. Furthermore, the combination of references does not teach, suggest or disclose each recitation of dependent Claims 28, 29 and 35 when the recitations of each claim are considered as a whole in view of their dependency from independent Claim 15.

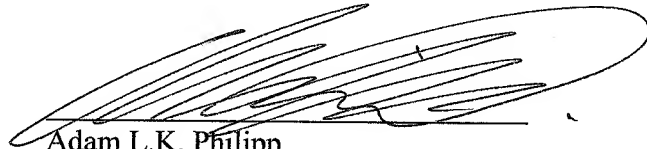
XI. SUMMARY

Applicants submit that all pending claims are in condition for allowance. Accordingly, early and favorable action allowing all of the pending claims and passing this application to issue is respectfully requested.

Respectfully submitted,
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Date: August 15, 2006

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APPENDIX A - Claims on Appeal

14. An apparatus comprising:
- a storage medium having stored thereon a plurality of programming instructions designed to enable a media player of the apparatus to
 - receive an identifier of a graphical display object;
 - receive default definition data of a class related to the graphical display object, the class default definition data having default values for a first plurality of elements of the graphical display object;
 - retrieve custom definition data related the graphical display object, the custom definition data having custom values for a second plurality of elements of the graphical display object, one or more of the first and second elements being the same elements;
 - build the graphical display object based first, on the custom values of the second plurality of elements and then, on the default values of the first plurality of elements that are not included among the second plurality of elements; and
 - a processor communicatively coupled to the storage medium to execute the programming instructions.
15. A method comprising:
- receiving by a media player operating on an electronic device, an identifier of a graphical display object;
 - retrieving by the media player, default definition data of a class related to the graphical display object, the class default definition data having default values for a first plurality of elements of the graphical display object;
 - retrieving by the media player, custom definition data related to the graphical display object, the custom definition data having custom values for a second plurality of elements of the graphical display object, one or more of the first and second elements being the same elements; and
 - building by the media player, the graphical display object based first, on the custom values of the second plurality of elements and then, on the default values of the first plurality of elements that are not included among the second plurality of elements.
25. The apparatus of Claim 14, wherein the graphical display object relates to a graphical user interface object.

26. The apparatus of Claim 25, wherein the graphical user interface object includes one or more selected from the group consisting of buttons, windows, menus, and touch sensitive screens.
28. The method of Claim 15, wherein the graphical display object relates to a graphical user interface object.
29. The method of Claim 28, wherein the graphical user interface object includes one or more selected from the group consisting of buttons, windows, menus, and touch sensitive screens.
34. The apparatus of Claim 14, wherein the media player is an audio player.
35. The method of Claim 15, wherein the media player is an audio player.
38. The apparatus of Claim 14, wherein the apparatus is a selected system one from the group consisting of a portable computing device, a portable audio player, a portable video player, a server, a computer workstation, a local area network of individual computers, an interactive television, an interactive kiosk, a personal digital assistant, an interactive wireless communication device, a handheld computer, a telephone, a router, a satellite, a smart card, and an embedded computing device.